

WHAT IS CLAIMED IS:

1. A method of supplying an underfill material for a semiconductor chip, comprising:

locating a wafer which receives a conductive bump on an upward front side; and

transferring an underfill material sheet adhered to a surface of a thin film member onto the upward front side of the wafer.

2. The method of supplying according to claim 1, further comprising:

urging the underfill material sheet onto the upward front side of the wafer after softening the underfill material sheet when transferring the underfill material sheet onto the wafer; and

peeling the thin film member from the underfill material sheet after hardening the underfill material sheet.

3. A method of mounting a semiconductor chip onto a printed circuit board, comprising reversing a wafer as a bulk of semiconductor chips prior to pickup of an individual semiconductor chip.

4. A method of mounting a semiconductor chip onto a printed circuit board, comprising:

forming a conductive bump on an upward front side of a wafer;

dicing the wafer on a first support member so as to cut out individual semiconductor chips;

superposing a second support member over the first support member so as to hold the semiconductor chips between

the first and second support members;

reversing the first support member along with the second support member holding the semiconductor chips therebetween;

picking up the individual semiconductor chips after removing the first support member.

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3. A method of making a semiconductor chip, comprising:  
forming a conductive bump on an upward front side of a wafer;

reversing the wafer; and

forming a resin lamination on a backside of the wafer.

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6. The method of making according to claim 5, further comprising transferring a resin sheet, adhered to a surface of a thin film member, to the backside of the wafer, in forming the resin lamination.

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7. A method of making a semiconductor chip, comprising:  
reversing a wafer receiving a conductive bump on an upward front side; and  
dicing the wafer from a backside of the wafer.

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8. The method of making according to claim 7, further comprising:  
irradiating an electromagnetic wave on the wafer; and  
determining a cutting position on the wafer based on the electromagnetic wave penetrating through the wafer.

9. The method of making according to claim 7, further comprising:

forming a nick along a contour of the semiconductor chip

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on the backside of the wafer; and  
forming an evaporated resin lamination on the backside  
of the wafer.

10. The method of making according to claim 9, further  
comprising cutting out an individual semiconductor chip along  
the nick with an incision narrower than the nick after formation  
of the evaporated resin lamination.

11. A method of making a semiconductor chip, comprising:  
locating a wafer receiving a conductive bump on an upward  
front side;  
adhering an underfill material sheet onto the upward  
front side of the wafer;  
reversing the wafer; and  
dicing the wafer from a backside of the wafer.

12. The method of making according to claim 11, further  
comprising:  
irradiating an electromagnetic wave on the wafer; and  
determining a cutting position on the wafer based on the  
electromagnetic wave penetrating through the wafer.

13. The method of making according to claim 11, further  
comprising:  
forming a nick along a contour of the semiconductor chip  
on the backside of the wafer; and  
forming an evaporated resin lamination on the backside  
of the wafer.

14. The method of making according to claim 13, further

comprising cutting out an individual semiconductor chip along the nick with an incision narrower than the nick after formation of the evaporated resin lamination.

15. A semiconductor chip comprising:

a conductive bump;

a chip body receiving the conductive bump at a downward front side;

a flange extending outward from a periphery of the chip body; and

an evaporated resin lamination extending along an upward surface of the flange, the periphery of the chip body and an upward backside of the chip body.

16. A method of mounting a semiconductor chip onto a printed circuit board, comprising:

locating a wafer receiving an underfill material sheet on a downward front side receiving a conductive bump;

forming a nick along a contour of the semiconductor chip on an upward backside of the wafer;

forming an evaporated resin lamination on the upward backside of the wafer;

cutting out an individual semiconductor chip along the nick with an incision narrower than the nick; and

urging the individual semiconductor chip against the printed circuit board.

17. An underfill material supplying film comprising:

a thin film tape; and

an underfill material sheet superposed on a surface of the thin film tape, wherein

a through hole is defined to continuously penetrate through the thin film tape and the underfill material sheet.

18. The underfill material supplying film according to claim 17, wherein a location of the through hole reflects a location of a conductive bump received on a surface of a corresponding wafer.

19. An underfill material supplying film comprising:  
a thin film tape; and  
an anisotropic conductive material sheet superposed on a surface of the thin film tape.

20. The underfill material supplying film according to claim 19, wherein a contour of the anisotropic conductive material sheet reflects a shape of the wafer.

21. The underfill material supplying film according to claim 19, wherein said anisotropic conductive material sheet contains metallic particles dispersed in an insulating layer received on the surface of the thin film tape.

22. The underfill material supplying film according to claim 21, wherein an utter insulating layer without metallic particles is superposed on a surface of the insulating layer.

23. The underfill material supplying film according to claim 22, wherein a contour of the anisotropic conductive material sheet reflects a shape of the wafer.

24. A semiconductor chip mounter comprising:

a platen;

a bonding head opposing a chip receiving surface to the platen; and

an electromagnetic wave output opening defined at the chip receiving surface of the bonding head.

25. The semiconductor chip mounter according to claim 24, wherein an optical fiber guiding an infrared ray from an infrared source is designed to expose its tip end at the electromagnetic wave output opening.

26. A method of mounting a semiconductor chip onto a printed circuit board, comprising:

attaching the semiconductor chip, receiving a conductive bump embedded in an underfill material sheet, to a chip receiving surface of a bonding head;

detecting a shadow of the conductive bump based on an electromagnetic wave penetrating through the semiconductor chip; and

positioning the bonding head based on the shadow of the conductive bump.

27. A semiconductor chip mounter comprising:

a platen;

a bonding head opposing a chip receiving surface to the platen; and

an irradiation source opposed to the chip receiving surface of the bonding head so as to irradiate an electromagnetic wave toward the chip receiving surface.

28. A method of mounting a semiconductor chip onto a

printed circuit board, comprising:

attaching the semiconductor chip, receiving a conductive bump embedded in an underfill material sheet, to a chip receiving surface of a bonding head;

irradiating an electromagnetic wave toward the underfill material sheet;

photographing a fluorescent light of the underfill material sheet; and

positioning the bonding head based on an intensity of the fluorescent light.

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